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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,519	12/05/2003	Masahiko Aoyama	2018-816	7821

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EXAMINER

POKER, JENNIFER A

ART UNIT

PAPER NUMBER

2832

DATE MAILED: 01/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/727,519

Applicant(s)

AOYAMA ET AL

Examiner

Jennifer A. Poker

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 October 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1,2 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *General Status*

1. This is a second action on the merits of amendment received October 19, 2004 of application filed December 5, 2003. Amended claims 1 and 2, and newly added claim 6 are pending and are being examined.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, and 6 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent Number 6,215,385 to Ogden.

Regarding claims 1 and 6, Ogden discloses an ignition coil comprising:

- (1) a cylindrical secondary spool with channels (figure 1; abstract; column 2, lines 9-15);
- (2) a secondary winding wound around the outer surface of the secondary spool (figure 1; abstract; column 2, lines 9-15);
- (3) an insulating potting material filled between the channels of the secondary spool and the turns of the secondary winding; the potting material hardens and further separating the secondary winding from other electrical components (abstract; figure 1; column 5, lines 8-17)
- (4) a case located around the periphery of the secondary winding (figure 1; column 2, lines 9-15);

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(5) a primary winding wound around the outer surface of the case (figure 1, column 2, lines 9-15);

(6) a high voltage portion having a tower and a well and being arranged on one end of an axial direction of the spools and windings; the high voltage end receives high-voltage terminal of a spark plug (figure 1; column 2, lines 66-67; column 3, line 1);

Ogden discloses the claimed invention except for stating that the primary case and the insulating potting material are in fact the same material and are integrally formed. Ogden does disclose, however, that any potting insulating material, which MANY are known to those skilled in the art, may be used (column 5, lines 8-21) and further discloses that the primary case may be made of any insulating material (column 5, lines 1-10).

One skilled in the art, at the time the invention was made, would have found it obvious to use suitable insulating materials, perhaps the SAME insulating material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Lesbin*, 125 USPQ 416. Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to integrally form the case and the potting material, since it has been held that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. *In re Larson*, 340 F.2d 965, 968, 144 USPQ 347, 349 (CCPA 1965)

Regarding claim 2, Ogden further discloses NO insulation potting material located within or around the windings of the primary winding.

### *Response to Arguments*

4. Applicant's arguments filed October 19, 2004 have been fully considered but they are not persuasive.

First, Examiner would like to point out that the definition of "integral" as defined by the Webster's Dictionary is "a complete unit; a whole," OR "Essential or necessary for completeness; constituent". No where was a definition found stating that "integral" hinted that components are formed "at the same time" as indicated by applicant on page 5 of the arguments.

In response to the arguments relating to Ogden's lack of "integrally" formed components, examiner respectfully disagrees. Ogden states that a potting material is used, not only to insulate and protect the components, but once the potting material is hardened, each of the components are formed into ONE piece. . . an integral structure ("complete unit" as defined by Webster's Dictionary). Applicant makes no reference in the claims that the structures were made at the "same time so as to provide an integral molded integrated structure." The potting material as described by Ogden DOES define the spool. It solidifies and then maintains the components in one hardened piece and maintains the structure of the device.

The newly incorporated case law (In re Larson) further upholds that "that the use of a one piece construction instead of the structure disclosed in [the prior art] would be merely a matter of obvious engineering choice.")

### *Conclusion*

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

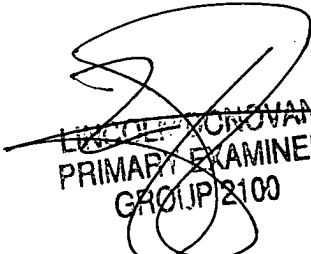
### *Contact Information*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer A. Poker whose telephone number is 571-272-1997. The examiner can normally be reached on 4:30-3:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin G. Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jap  
January 8, 2005

  
~~LESTER DONOVAN~~  
PRIMARY EXAMINER  
GROUP 2100